CRS SITE GROUP POSITION PAPER
SOURCE REMOVAL OPTIONS IN THE NORTHWEST CORNER

The CRS Site Group has considered the information provided by USEPA during our March 22, 2007 meeting in Chicago. The Group is unwavering in its support for the preferred alternative set forth in the approved RI/FS and continues to urge EPA to again accept this alternative. The soil cap with an impermeable geomembrane liner in the northwest corner, presented as Alternative 2 in the FS, provides superior protection of human health and the environment. With the additional geosynthetic clay liner over the northwest corner, as presented during our meeting, there can be no question that the containment remedy satisfies the permanence and long-term effectiveness criterion under CERCLA. It is now clear that EPA is not disputing that the containment remedy in the approved RI/FS addresses all identified risks at the Site and it is an acceptable remedy under CERCLA criteria and EPA guidance.

It is also clear that EPA, despite the historic source removals of contaminated soils, drums, tanks and process/production activities, is seeking an additional source removal component to the remedy at this Site, which is not needed to address risk. EPA policy states that containment is one of the ways that source removal can be achieved.[1] It should follow that where containment addresses all identified site risks, additional source removal is not warranted. EPA has not identified any technical insufficiencies with the capping containment remedy presented in the approved FS. At this time, EPA has indicated that it would be moving forward with source removal with or without the Group's concurrence. Therefore, although the CRS Site Group remains adamant that the proposed additional source removal component to the remedy goes beyond addressing the agreed upon Site risks (and nothing in this paper should be viewed to the contrary), we will spend the remainder of this paper addressing ways that EPA's recently proposed source removal component of the remedy could be improved.

Source Removal Options

Since the soil cap remedy in the approved RI/FS already addresses all risks to the 1×10^{-6} risk level, a source removal at the Site, while unnecessary, could target high concentration "hot spots" for removal without being concerned with whether the contaminants left at the Site are going to present an unacceptable risk. We strongly believe that any source removal that the Agency proposes should be combined with the preferred remedy in the approved RI/FS - the soil cap and an impermeable clay layer or geomembrane liner over the northwest corner. Source removal with a more permeable cap will not be as protective of human health and the environment, and it will not be as effective in ensuring that residual concentrations are immobilized.

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[1] USEPA OSWER Directive 9200.4-17P – Use of Monitored Natural Attenuation at Superfund, RCRA Corrective Action, and Underground Storage Tank Sites – April 21, 1999, at 21.

If the Agency pursues source removal to expedite closure, the method for removing the source should be the one that is most effective at removing the peak TCE concentrations of concern in the top four feet of soil around GP-37, GP-39 and GP-40. The Group looked at Soil Vapor Extraction and Targeted Excavation as two source removal alternatives. We concluded that SVE under a cap may work,[2] but to achieve the goal of expedited closure through source removal we needed to know how much VOC could be removed per unit of time and how much source removal EPA would require of the system before it could be closed. The unconsolidated fill at the Site makes it difficult to predict how quickly SVE could remove the TCE volatiles of concern. Additional data could be collected from the Site to evaluate SVE feasibility, but doing so prior to public review under EPA's current schedule is not realistic. If EPA continues to pursue source removal and wants to preserve SVE as a source removal option, the Agency could draft its Proposed Plan to allow the method of source removal in the northwest corner to be determined during the remedial design after obtaining the necessary data from the pre-design investigation.

The Group suspects, however, that the more effective and more timely source removal option will be a targeted excavation with predetermined cut-lines horizontally and vertically. U.S. EPA indicated that a site specific target level (SSTL) of 14 mg/kg for trichloroethylene (TCE) would be used in the northwest portion of the site to establish horizontal and vertical excavation cut lines. EPA used the existing chemical soil data in the RI to estimate that vertical excavation would achieve 14 mg/kg TCE or less after removing the first four feet of soil in the northwest corner. Figure 1 reflects The Group's analysis of existing data to estimate the horizontal extent of soils in the northwest portion of the site with TCE concentrations greater than 14 mg/kg (the soils surrounding GP-37, GP-38, GP-39, and GP-40). Based on EPA's proposed excavation depth of four feet, the volume of soils in the defined area to be excavated is estimated to be 1,200 cubic yards. This does not include the isolated elevated TCE reading at GP-45 (77 mg/kg), which could be excavated separately to four feet.

Since the soil cap remedy already adequately addresses agreed upon Site risk, confirmatory sampling of soils that will be under the enhanced cap would not be necessary. The excavation may extend beyond the predetermined cut lines to remove visibly affected soils or soils with high PID readings. Otherwise, excavating 1200 cubic yards (+ the GP-45 area) will achieve EPA's source removal objective, while the enhanced soil cap remedy in the approved RI/FS protects human health and the environment. Residual volatile constituents that may remain underneath the cap will continue to degrade over time as described in the approved RI/FS. Sample results from the bottom of the excavation are irrelevant to assessing the protectiveness and effectiveness of the remedy.

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[2] EPA's START contractor's concerns with SVE feasibility at the Site are not insurmountable. (1) Conducting SVE under an impermeable barrier eliminates vertical preferential pathways. (2) Pulling vacuum only in the top four feet of soil, eliminates the risk of upwelling in groundwater present at 12 – 16 feet below ground surface. (3) By relying on the enhanced soil cap to address risk, SVE would be designed to achieve mass removal instead of risk-based cleanup goals.

As the excavation area is surrounded by the areas of the Site that are to receive a four (4) foot soil cap, the excavation area would require additional material and soil for backfill and grading purposes. EPA agreed to allow clean demolition debris from the buildings on site as the material for backfill in this area. The soil added to cap the northwest corner area, however, should be an engineered fill consisting of a layer of low permeability, clayey type soil to minimize future infiltration through the soil matrix in this area. Again, partial excavation with a more permeable soil cap is less protective of human health and the environment than the preferred enhanced soil cap remedy in the approved RI/FS.

Please address any questions to CRS Site Group Chair and Common Counsel, Douglas McWilliams at 216-479-8332 or dmcwilliams@ssd.com. This position paper is submitted in compromise negotiations and, as such, is inadmissible under Federal Rule of Evidence 408.

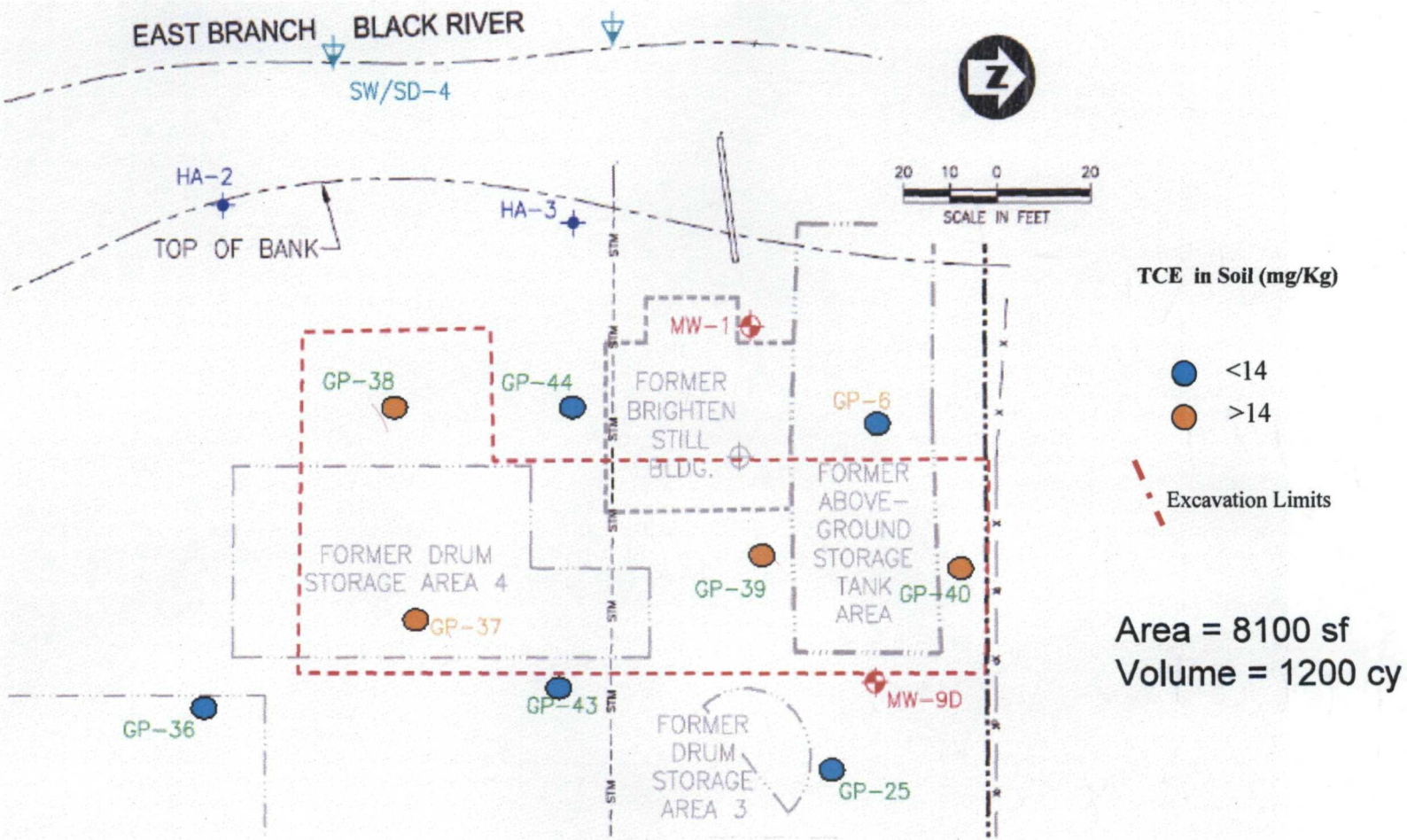

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FIGURE 1

EXCAVATION LIMITS